



Figure 160.071-17(m)(3).

Method of mounting sample for seam strength test.

Subpart 160.174—Thermal Protective Aids

SOURCE: CGD 84-069b, 51 FR 19343, May 29, 1986, unless otherwise noted.

§ 160.174-1 Scope.

This subpart contains construction and performance requirements, and approval tests for thermal protective aids that are designed to minimize the occurrence of or aid in the recovery from hypothermia (lowered body temperature) during long periods in a survival craft.

§ 160.174-3 Incorporation by reference.

(a) Certain materials are incorporated by reference into this subchapter with the approval of the Director of the Federal Register. The Office of the Federal Register publishes a table, "Material Approved for Incorporation by Reference," which appears in the Finding Aids section of this volume. In that table is found citations to the particular sections of this part where the material is incorporated and the date of the approval by the Director of the Federal Register. To enforce any edition other than the one listed in paragraph (b) of the section, notice of

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change must be published in the FEDERAL REGISTER and the material made available. All approved material is on file at the Office of the Federal Register, Washington, DC 20408, and at Coast Guard Headquarters. Contact Commandant (CG-ENG-4), Attn: Life-saving and Fire Safety Division, U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue, SE., Washington, DC 20593-7509, Washington, DC 20593-7126.

(b) The materials approved for incorporation by reference in this subpart are:

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM C 177-85 (1993), Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus—160.174-17

ASTM C 518-91, Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus—160.174-17

ASTM D 975-98, Standard Specification for Diesel Fuel Oils—160.174-17

ASTM D 1004-94a, Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting—160.174-17

ASTM D 1518-85 (1990), Standard Test Method for Thermal Transmittance of Textile Materials—160.174-17

GENERAL SERVICES ADMINISTRATION

Specification Unit (WFSIA), Regional Office Building, Room 6039, 7th and D Streets SW., Washington, DC 20407

Federal Standard No. 751a—Stitches, Seams, and Stitchings.

National Bureau of Standards Special Publication 440—Color, Universal Language and Dictionary of Names.

[CGD 84-069b, 51 FR 19343, May 29, 1986, as amended by CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50733, Sept. 27, 1996; CGD 97-057, 62 FR 51049, Sept. 30, 1997; USCG-1999-6216, 64 FR 53228, Oct. 1, 1999; USCG-1999-5151, 64 FR 67184, Dec. 1, 1999; USCG-2009-0702, 74 FR 49238, Sept. 25, 2009; USCG-2013-0671, 78 FR 60159, Sept. 30, 2013]

§ 160.174-5 Independent laboratory.

(a) The approval and production tests and inspections in this subpart must be conducted by an independent laboratory accepted by the Coast Guard under subpart 159.010 of this chapter.

(b) [Reserved]

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§ 160.174-7 Approval procedures.

(a) *General.* A thermal protective aid is approved by the Coast Guard under the procedures in subpart 159.005 of this chapter.

(b) *Approval testing.* Each approval test must be conducted in accordance with § 160.174-17.

§ 160.174-9 Construction.

(a) *General.* Each thermal protective aid must be constructed primarily of a durable insulating or heat reflecting material that meets the thermal insulation requirements in § 160.174-11(a). Each aid must be designed to cover the wearer's entire body, except for the area of the mouth, nose, and eyes.

(b) *Seams.* Stitching, if used in structural seams of a thermal protective aid, must be lock type stitching that meets the requirements in Federal Standard No. 751 for one of the following:

(1) Class 300 lockstitch.

(2) Class 700 single thread lock stitch.

(c) *Seam strength.* Each seam must have a strength of at least 225 Newtons (50 lb.).

(d) *Hardware.* All hardware of a thermal protective aid must be of a size and design that allows ease of operation by the wearer. The hardware must be attached to the aid in a manner that allows the wearer to operate it easily and that prevents it from attaining a position in which it can be operated improperly.

(e) *Metal parts.* Each metal part of a thermal protective aid must be—

(1) 410 stainless steel or have salt water and salt air corrosion characteristics equal to or superior to 410 stainless steel; and

(2) Galvanically compatible with each other metal part in contact with it.

(f) *Thermal protective aid exterior.* The primary color of the exterior surface of each thermal protective aid must be vivid reddish orange (color number 34 of National Bureau of Standards Publication 440). The exterior surface of the aid must resist tearing when tested as prescribed in § 160.174-17(i).

(g) *Hand and arm construction.* The hand of each thermal protective aid must be a glove that allows sufficient dexterity for the wearer to close and